November Test 1

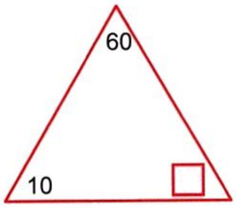
Total mark 15

1. Choose the correct answer. (5 marks)

1. Which of the following is a multiple of 5 ?

   A. 12 B. 56 C. 45 D. 89

2. The missing factor in the box equals ______



   A. 6,000 B. 600
   C. 60 D. 6

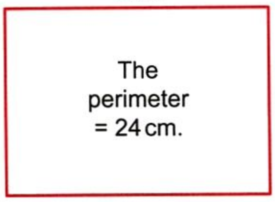
3. 45 is ______ times the number 9.

   A. 40 B. 5 C. 6 D. 9

4. A square its side length is S. What is its perimeter ?

   A. S + S B. S × S C. S × 4 D. S + S + S

5. **In the opposite figure :**



   The value of y is ______

   A. 4 cm B. 5 cm
   C. 6 cm D. 7 cm

2. Complete. (5 marks)

1. The multiplication equation of 8 + 8 + 8 + 8 + 8 = 40 is ______
2. 2 × [3 × 4] = [2 × ______] × 4
3. If A × 7 = 35, then A = ______
4. ______ is the only even prime number.
5. 10 is ______ times the number 2.

3. a. Sandy purchased 3 kg , 400 g of sugar and 5 kg , 217 g of rice. What is the total mass which Sandy carried ? (2 marks)

b. Find the G.C.F of 40 and 50. (3 marks)

November Test 2

Total mark 15

1. Choose the correct answer. (5 marks)

1. The common factor of all numbers is ....

   A. 0 B. 1 C. 2 D. 3

2. If a × 33 = 33 × 7 , then a = ...

   A. 33 B. 40 C. 7 D. 31

3. The length of a rectangle = ...

   A. Area ÷ length B. Area ÷ width

   C. Length × width D. Area × width

4. If ants walk about 3,000 meters each day , then the ants walk .... km

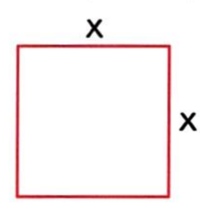
   A. 3 B. 150 C. 15,000 D. 15

5. Which of the following is not a prime number ?

   A. 2 B. 7 C. 9 D. 11

2. Complete. (5 marks)

1. If the area of the opposite figure equals 25 cm^2 , then the value of x is .... cm



2. 160 = ... tens
3. All the factors of 10 are ....
4. 500 x 3 = ...
5. The perimeter of the rectangle = ... + ...

3.

a. Amal is putting a border around the edge of a square cake. One side of the cake is 30 cm long. How long will the border of Amal's cake be ? (2 marks)

....

....

b. List the common factors and the greatest common factor (G.C.F) of 18 and 6 (3 marks)

Factors of 18 : ....

Factors of 6 : ....

Common factors : ....

G.C.F : ....

November Test 3

Total mark 15

1. Choose the correct answer. (5 marks)

1. All the following numbers are composite except ....

   A. 66 B. 67 C. 68 D. 69

2. What number is 10 times the number 17 ?

   A. 27 B. 1,700 C. 7 D. 170

3. The length of a rectangle is b , the width is c
   What is its area ?

   A. b + c B. b × c
   C. [2 × b] + [2 × c] D. [2 × b] × [2 × c]

4. If Marvina studied from 4:10 P.M. to 5:00 P.M. , then she studied .... minutes.

   A. 60 B. 110 C. 40 D. 50

5. [200 × 3] × 0 = ...

   A. 600 B. 6,000 C. zero D. 203

2. Complete. (5 marks)

1. If a × 7 = 7 × 8 , then a = ...
2. 19,000 = ... × 19
3. .... is 5 times the number 3
4. 18 has .... factors.
5. The perimeter of a square of side length 10 m is .... m

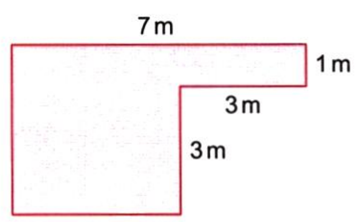
3. a. Apply the properties of multiplication to find : 2 × 3 × 5 (2 marks)

....

....

....

b. Calculate the area and the perimeter of the following complex shape. (3 marks)



....

....

....

Model 1

2024

First Choose the correct answer:

1. The perimeter of the rectangle = ...

(P = L X W or P = L + (W X 2) or P = (L + W) X (L + W) or P = (L + W) X 2)

2. If a square has a side length of 6 cm, then its perimeter is .... cm.

(24 or 36 or 18 or 22)

3. The area of the square = ...

(A = S X 4 or A = S X 2 or A = S – S or A = S X S)

4. If a rectangle has a length of 8 cm and a width of 4 cm, then its surface area is .... cm^2 .

(32 or 12 or 24 or 84)

5. An aquarium contains 5 red fish and 3 times as many blue fish. How many blue fish are there in the tank?

(53 or 15 or 8 or 2)

6. 7 X (3 X 5) = (.................. X 3) X 5

(21 or 7 or 5 or 3)

7. The smallest even prime number is ....

(0 or 1 or 2 or 3)

Second Complete the following:

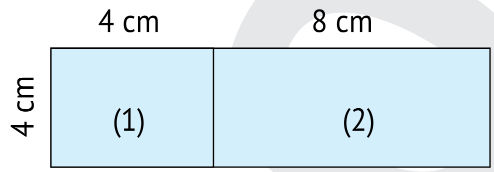
1. A rectangle of 15m length and 10m width, its perimeter is .... m.
2. A square with a side length of 6 cm, its area is .... cm^2.
3. x X 5 = 35 , x = ...
4. .... X 2 = 2 X 6

Third Essay questions:

1 **Calculate the perimeter and area of the following figure:**

a Area = ...
....

b Perimeter = ...
....



2 In a restaurant, a piece of glass is cut to cover the top of a dining table. The table is 8 meters by 6 meters. What is the area of the piece of glass needed for this table?

....

3 **Find the greatest common factor of each of the following numbers:**

10 and 15

– Factors of 10 are: ....

– Factors of 15 are: ....

– The common factors are: ....

– The GCF is: ....

4 **Match:**

a A multiple of 5 is	1 [1]
b A factor of 16 is	40 [2]
c The common factor of all numbers is	8 [3]

Model 2

First Choose the correct answer:

1. The number that has only two factors is called a/an .... number.
(composite or prime or even or odd)

2. .... is a common multiple of 4 and 6.
(12 or 16 or 18 or 30)

3. All the following numbers are multiples of 3, except ....
(17 or 24 or 18 or 9)

4. A rectangle has a length of 7 cm and a width of 5 cm. Its perimeter is .... cm.
(97 or 13 or 35 or 24)

5. A square with sides of 7 mm, has a surface area of .... mm^2 .
(14 or 49 or 28 or 36)

6. 5 + 0 = 5 (.............................. Property)
(Distributive or Associative or Commutative or Additive Identity Element)

7. 6 X 300 = 18 X ....
(9 or 10 or 100 or 1,000)

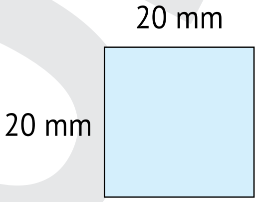
Second Complete the following:

1. (25 X ....) x 16 = ... X (18 x 16)
2. The greatest common factor of 7 and 5 is ....
3. A square has an area of 25 cm^2, the length of its side is .... cm
4. A rectangle has an area of 32 cm^2 and a width of 4 cm. Its perimeter is .... cm

Third Essay questions:

1. **Calculate the perimeter and area of each of the following shapes:**

(a)



....

....

(b)



....

....

2. Rashad's team scored **9** goals in football. This is **3** times greater than the number of goals scored by Yassin's team. How many goals did Yassin's team score?

Equation: ....

Answer: ....

3. Use the **Associative Property of Multiplication** to calculate the number of pens in the picture.



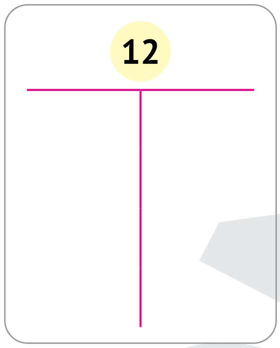
....

....

....

....

4. The factors of **12** are: ....



Model 3

First Choose the correct answer:

1. Which of the following represents the Associative Property?

   ((2 X 3) X 5 = 2 X (3X5) or 4 X 1 = 4 or 3 + 6 = 6 + 3 or 5 X 0 = 0)

2. The smallest prime number is ………………………… . (1 or 2 or 3 or 4)

3. If 7 X 3 = 21, then 3 and 7 are factors of ………………………… .

   (7 or 21 or 3 or 37)

4. A square with a side length of 8 cm, its area is ………………………… cm^2.

   (88 or 32 or 64 or 16)

5. A rectangle has an area of 30 cm^2 and a width of 5 cm. Its length is

   ………………………… cm. (35 or 6 or 9 or 25)

6. The equation that shows "48 is six times greater than m" is

   ………………………… . (8 + m = 48 or 8 X m = 48 or 48 X m = 6 or 6 X m = 48)

7. The whole number one is neither a prime nor a composite number

   because it has ………………………… .

   (no factors or two factors only or one factor only or more than two factors)

Second Complete the following:

1. A square has a perimeter of 16 cm, the length of its side is ……………… cm.

2. A rectangle has an area of 45 cm^2 and a width of 5 cm, then its

   perimeter is ………………………… cm.

3. If a = 6 X 9, then a = ………………………… .

4. 30 X 1,000 = …………………………

Third Essay questions:

1. – Factors of 16 are: ....
   – Factors of 20 are: ....
   – The common factors are: ....
   – The GCF is: ....

2. Write 5 multiples of 9: (.................., ..., ..., ..., ...)

3. Sameh's book is 30 cm long. The cover of Sameh's book has a perimeter of 100 cm. What is Sameh's book width?

   ....

   ....

4. If the price of one pen is 3 pounds, what is the price of 7 pens?

   ....

   ....

Model 4

First Choose the correct answer:

1. All prime numbers are odd numbers, except .... is an even number. (1 or 2 or 3 or 0)
2. The greatest common factor of 21 and 35 is .... (5 or 7 or 8 or 3)
3. .... is an odd number that is a multiple of 3 and 5, and it lies between 10 and 30. (8 or 15 or 20 or 25)
4. The perimeter of the rectangle = ... (P = L X W or P = L X W X L X W or P = L + W + L + W or P = L X W X 2)
5. The total area of the opposite figure is 40 cm^2 . The area of the rectangle .... cm^2 .



(56 or 24 or 16 or 40)

6. The area of a rectangle with dimensions 7 cm and 2 cm is .... cm^2 . (27 or 18 or 9 or 14)
7. 3 X 700 = 3 X 100 X .... (7 or 30 or 500 or 21)

Second Complete the following:

1. The number of factors of 25 is ....
2. A square whose perimeter is 20 cm, its side length = ... cm
3. A rectangle has an area of 36 cm^2 and a width of 4 cm. Its perimeter is .... cm.
4. 45 is 9 times greater than what number?

   Equation : ....

Third Essay questions:

1 **complete**

4 X 5 X 3 = (.................... X ....) X ....

= .... X ....

= ....

2 **complete**

If .... = 8 x 3, then .... is a multiple of the two numbers **8** and **3**.

Also, ... and .... are factors of the number ....

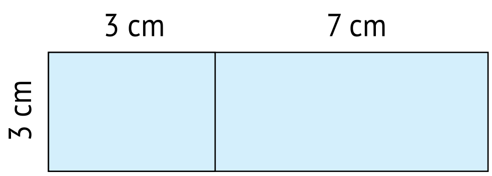
3 In the following figure, there are **two** conjoined rectangles.

The sum of their areas:

....

....

....



4 Mona's book is **25** cm long. The cover of the book has an area of **250** cm^2.

What is the book width?

....

....

Model 5

First Choose the correct answer:

1. .... is a prime number.

(64 or 15 or 17 or 21)

2. .... is a number that is a multiple of 2, 3, and 4, and lies between 20 and 30.

(24 or 26 or 28 or 45)

3. A rectangle has a length of 6 cm and a width of 8 cm, so its perimeter is .... cm.

(86 or 28 or 14 or 48)

4. Sameh is three times the age of his brother. His brother is 4 years old. Which of the following equations is used to know the age of Sameh? ....

(a = 4 ÷ 3 or a = 3 + 4 or a = 4 – 3 or a = 3 X 4)

5. A number whose factors are (1 ,2 ,4 ,5 ,10 ,20) is ....

(20 or 10 or 100 or 200)

6. .... is a multiple of all numbers.

(0 or 1 or 2 or 3)

7. 27 is a common multiple for 9 and ....

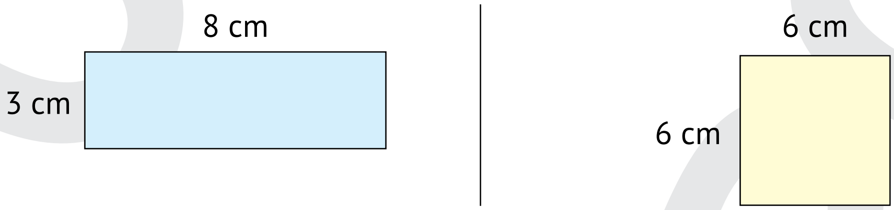
(2 or 5 or 3 or 7)

Second Complete the following:

1. 16 is .... times greater than 2.
2. .... X 10 = 400
3. 5,000 = ... Hundreds
4. The smallest odd prime number is ....

Third Essay questions:

1. Combine the following two geometric shapes to form **one** odd shape. Calculate the **area** and **perimeter** of this shape. Draw your geometric figure and write the measurements on the sides.



....

....

....

....

....

2. A square has sides of **3** cm. Write an equation showing the perimeter of the square (**P**).

....

3. A farm with **15** ducks and **25** chickens. Divide these birds into groups equal in number. How many groups are there? How many ducks and chickens are in each group?

....

4. Find the multiples of each of **4** and **5**, up to **40**. Then find the common multiples between them:

– The multiples of **4** are: ....

– The multiples of **5** are: ....

– The **common multiples** of the two numbers are ....

Model 6

First Choose the correct answer:

1. A square has a side length of 10 cm, its perimeter is .... cm.

   (40 or 100 or 20 or 65)

2. If a rectangle has a perimeter of 60 cm and a length of 20 cm, then its width is .... cm.

   (3 or 10 or 40 or 50)

3. If 6 X y = 24, then y = ...

   (8 or 18 or 30 or 4)

4. .... is 5 times greater than 7.

   (14 or 35 or 21 or 28)

5. 30 X 40 = 12 X ....

   (34 or 10 or 100 or 1,000)

6. The smallest odd number is ....

   (1 or 2 or 3 or 5)

7. 6 is a composite number because it has ....

   (one factor only or two factors only or more than two factors or no factors)

Second Complete the following:

1. The number of factors of 9 is .... factors.
2. 12 has .... factors which are ....
3. A square with side length of 20 mm, its area is .... mm^2.
4. A rectangle has a perimeter of 28 cm and a length of 8 cm, then its area is .... cm^2 .

Third Essay questions:

1. An even number is a multiple of 3, 5, 10 and lies between 20 and 40.

   The number is ....

2. A rectangular mirror with an area of 1200 square centimeters. The mirror is 40 cm long. What's its width?

   ....

   ....

3. **Calculate the perimeter and area of the corresponding figure:**

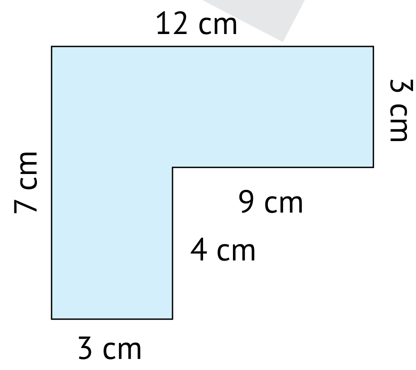
   ....

   ....

   ....

   ....

   ....



4. Hazem has five times the money that Karim has. If Hazem has 45 pounds, what is the amount of money that Karim has?

   ....

   ....

Model 7

First Choose the correct answer:

1. .... is a common multiple of 8 and 3.

(15 or 32 or 24 or 27)

2. The perimeter of the rectangle = ...

(P = (L X 2) + (W X 2) or P = (L + 2) X (W + 2) or P = (L X W) X 2 or P = L + W)

3. A rectangle has a length of 7 cm and a width of 2 cm. Its perimeter is ....

(14 or 16 or 18 or 28)

4. A square has a perimeter of 20 cm, the length of its side is .... cm.

(5 or 4 or 10 or 7)

5. Sarah and her sister peeled some oranges. Sarah peeled 6 oranges. Sarah's sister peeled 3 times as many oranges as Sarah. Which of the following equations can be solved to find the number of oranges that Sarah's sister peeled? ....

(n X 3 = 6 or n = 3 X 6 or n = 6 ÷ 3 or n = 6 + 3)

6. 2 X .... = 18 X 100

(18 or 9 or 90 or 900)

7. The Multiplicative Identity Element is ....

(1 or 2 or 0 or 3)

Second Complete the following:

1. If the area of a square is 49 m^2, then its perimeter is .... cm
2. 48 is 6 times as many as .... Equation: ....
3. 120 X .... =120,000
4. An even prime number is ....

Third Essay questions:

1. Saleh has **15** apples, and his sister Hala has **5** apples. How many more times does Saleh have the same number of apples as Hala?

Equation: ....

Answer: ....

2. **Complete using (< , = or >):**

ⓐ 8 X 21 ( ) 8 X 7 X 2 ⓑ 18 X 5 ( ) 6 X 3 X 5

ⓒ 5 X 12 ( ) (5 X 2) X 4 ⓓ 20 X 90 ( ) 6 X 300

3. If 14 X 5 = 70, then .... X .... = 70. *(Commutative Property)*

4. Write **10** common multiples of **2**, **5** and **10**: .... , ... ,

.... , ... , ... , ... , ... ,

.... , ... , ...

Model 8

First Choose the correct answer:

1. The prime number has .... only.

   (one factor or two factors or three factors or five factors)

2. The numbers (1, 7, 14, 2) are factors of ....

   (14 or 7 or 5 or 24)

3. .... is a common multiple of 4 and 6.

   (12 or 16 or 18 or 30)

4. 50 x .... = 20,000

   (4 or 40 or 400 or 4,000)

5. All the following numbers are multiples of 3, except ....

   (17 or 24 or 18 or 9)

6. A rectangle has a length of 6 cm and a width of 3 cm. Its perimeter is ....

   (36 cm^2 or 18 cm or 18 cm^2 or 9 cm^2)

7. A square has an area of 36 cm^2, the length of its side is .... cm.

   (5 or 9 or 4 or 6)

Second Complete the following:

1. .... is a multiple of 9, and lies between 30 and 40.
2. A rectangle has a length of 5 cm and a width of 3 cm, its perimeter is .... cm.
3. A square whose sides are 20 mm, then its perimeter is:

   P= ....

4. (.................................. X 3) X 10 = 7 X (3 X ....)

Third Essay questions:

1. **Find the greatest common factor of each of the following numbers:**

10 , 15

Factors of 10 are ....

Factors of 15 are: ....

The common factors are: ....

The GCF is: ....

2. Write two common multiples of 4 and 9: (.................................. , ...)

3. An odd number is a multiple of 5 and 9, and it lies between 30 and 50.

The number is ....

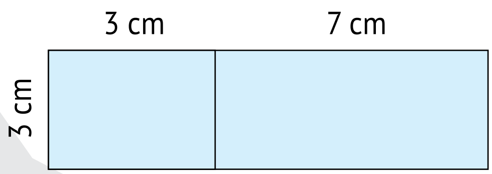
4. In the following figure, there are two conjoined rectangles.

The sum of their areas:

....

....

....



Model 9

First Choose the correct answer:

1. A square has a perimeter of 12 cm, then its area is .... cm^2 .

(21 or 3 or 9 or 24)

2. The equation "m = 4 X 2" represents a number equal to ....

(4 times more than 2 or 4 times more than 4 or 2 times more than 2 or 8 times more than 4)

3. .... X 200 = 10 X 100

(100 or 5 or 50 or 10)

4. If 45 = 9 X a, then a = ...

(54 or 45 or 9 or 5)

5. The number of factors of 14 is .... factors.

(3 or 2 or 4 or 6)

6. .... is a multiple of 8.

(2 or 16 or 12 or 9)

7. The common multiple of all numbers is ....

(1 or 9 or 4 or 0)

Second Complete the following:

1. A rectangle has an area of 45 cm^2 and a width of 5 cm, so its length = ... cm.
2. If 30 is a multiple of 5 and 6, then .... X .... = ...
3. The prime numbers between 40 and 50 are ....
4. .... Hundreds = 400 X 50

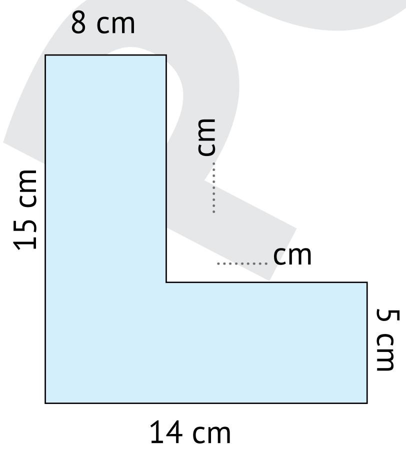
Third Essay questions:

1. A city is in the shape of a rectangle. It is 4 kilometers wide and 8 kilometers long. What is the area of this city?

....

....

2. **Calculate the perimeter and area of the corresponding figure:**



....

....

....

....

....

3. What number is 5 times greater than 9?

Equation: ....

Answer: ....

4. **Complete using (< , = or >):**

a) 6 X 1 ⬭ 5 X 1 b) 9 X 0 ⬭ 8 X 0

c) 3 X 1 ⬭ 0 X 7 d) 40 X 2 ⬭ 4 X 20

Model 10

First Choose the correct answer:

1. Area of the rectangle ....

(A = (L + W) X 2 or A = L + W or A = L – W or A = L X W)

2. A square has an area of 25 cm^2, its perimeter is .... cm.

(5 or 20 or 100 or 32)

3. If 3x = 9, then x = ...

(3 or 27 or 12 or 6)

4. If 6 x m = 18, then 18 is .... times as many as m.

(3 or 6 or 2 or 18)

5. The age of Kenzy is 3 times as the age of Retage. If Retage is 6 years old, then the equation .... represents the age of Kenzy.

(3 + 3 + 3 or b X b = 3 or 3 X 6 = b or 3 X b = 6)

6. (8 X 2) X 10 = ... X 10

(20 or 8 or 2 or 16)

7. 5 is a prime number because it has ....

(no factors or two factors only or one factor only or more than two factors)

Second Complete the following:

1. A square has a perimeter of 40 cm, then its area is .... cm^2 .
2. A rectangle has an area of 30 cm^2 and a length of 10 cm. Then its perimeter is .... cm.
3. 35 is 5 times more than .... Equation: ....
4. The greatest common factor of 9 and 6 is ....

Third Essay questions:

1. The bookcase in a library contains 6 shelves, each shelf has 20 books.
   How many books are there in the bookcase?

   ....

2. Use the **Associative Property of Multiplication** to calculate the number of books in the opposite picture.

   ....
   ....
   ....
   ....



3. Find the multiples of each of 2 and 5, up to 20. Then find the common multiples between them:

   – The multiples of 2 are: ....

   – The multiples of 5 are: ....

   – The **common multiples** of the two numbers are: ....

4. Draw **two** rectangles, each with an area of 18 cm^2, then find the perimeter of each of them:

Perimeter = ...	Perimeter = ...

Model 1

First:

1. P = (L + W) X 2
2. 24
3. A = S X S
4. 32
5. 15
6. 7
7. 2

Second:

1. 50
2. 36
3. 7
4. 6

Third:

1. ⓐ Area = (4 X 4) + (8 X 4) = 48 cm^2
   ⓑ Perimeter = 8 + 4 + 4 + 4 + 8 = 4 = 32 cm
2. Area of glass = 8 X 6 = 48 m^2
3. – Factors of 10 are: 1, 2, 5, 10
   – Factors of 15 are: 1, 3, 5, 15
   – The common factors are: 1, 5
   – The GCF is: 5
4. ⓐ [2] 40 ⓑ [3] 8
   ⓒ [1] 1

Model 2

First:

1. prime
2. 12
3. 17
4. 24
5. 49
6. Additive Identity Element
7. 100

Second:

1. (25 X 18) X 16 = 25 X (18 X 16)
2. 1
3. 5
4. 24

Third:

1. ⓐ P = 20 X 4 = 80 mm
   A = 20 X 20 = 400 mm^2
   ⓑ P= (8 + 4) X 2 = 24 cm
   A = 8 X 4 = 32 cm^2
2. Equation: 9 = 3 x
   Answer: x = 3
3. The number of pens = 3 X 3 X 4
   = (3 X 3) X 4
   = 9 X 4 = 36 pens
4. 1, 2, 3, 4, 6, 12

12	
1	12
2	6
3	4

Model 3

First:

1. (2 X 3) X 5 = 2 X (3 X 5)
2. 2
3. 21
4. 64
5. 6
6. 6 X m = 48
7. one factor only

Second:

1. 4
2. 28
3. 54
4. 30,000

Third:

1. – Factors of 16 are: 1, 2, 4, 8, 16
   – Factors of 20 are: 1, 2, 4, 5, 10, 20
   – The common factors are: 1, 2, 4
   – The GCF is: 4
2. 9, 18, 27, 36, 45
3. Width = (100 ÷ 2) – 30
   = 50 – 30 = 20 cm
4. The price = 7 X 3 = 21 pounds

Model 4

First:

1. 2
2. 7
3. 15
4. P = L + W + L + W
5. 24
6. 14
7. 7

Second:

1. 3
2. 5
3. 26
4. 45 = 9 x

Third:

1. $4 \times 5 \times 3 = (4 \times 5) \times 3$
   $= 20 \times 3 = 60$
2. 24 , 24 , 8 , 3 , 24
3. $A = (3 \times 3) + (7 \times 3)$
   $= 9 + 21 = 30\ cm^2$
4. Width = 250 ÷ 25 = 10 cm

Model 5

First:

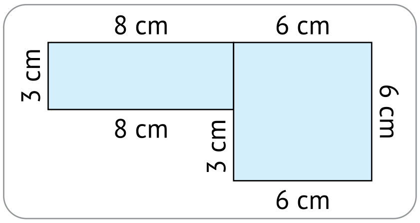
1. 17
2. 24
3. 28
4. a = 3 X 4
5. 20
6. 0
7. 3

Second:

1. 8
2. 40
3. 50
4. 2

Third:

1.



Area = $(8 \times 3) + (6 \times 6)$
$= 24 + 36 = 60\ cm^2$
Perimeter = 8 + 6 + 6 + 6 + 3 + 8 + 3
= 40 cm

2. $P = 3 \times 4 = 12$ cm
3. Number of groups (GCF) = 5 groups.
   (3 ducks + 5 chickens)
4. – The multiples of 4 are: 0, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40
   – The multiples of 5 are: 0, 5, 10, 15, 20, 25, 30, 35, 40
   – The common multiples of the two numbers are: 0, 20, 40

Model 6

First:

1. 40
2. 10
3. 4
4. 35
5. 100
6. 1
7. more than two factors

Second:

1. 3
2. 6 , 1, 2, 3, 4, 6, 12
3. 400
4. 48

Third:

1. 30
2. Width = 1,200 ÷ 40 = 30 cm
3. P = 12 + 3 + 9 + 4 + 3 + 7
   = 38 cm
   $A = (12 \times 3) + (4 \times 3)$
   $= 36 + 12 = 48\ cm^2$
4. $45 = 5x$
   Karim has (x) = 45 ÷ 5 = 9 pounds

Model 7

First:

1. 24
2. P = (L X 2) + (W X 2)
3. 18
4. 5
5. n = 3 X 6
6. 900
7. 1

Second:

1. 28
2. 8 , 48 = 6 X 8
3. 1,000
4. 2

Third:

1. Equation: $15 = 5x$
   Answer: $x = 15 \div 5 = 3$
2. a > b =
   c > d =
3. 5 X 14
4. 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

Model 8

First:

1. two factors
2. 14
3. 12
4. 400
5. 17
6. 18 cm
7. 6

Second:

1. 36
2. 16
3. P = 20 X 4 = 80 cm
4. 7 , 10

Third:

1. – Factors of 10 are: 1, 2, 5, 10
   – Factors of 15 are: 1, 3, 5, 15
   – The common factors are: 1, 5
   – The GCF is: 5
2. 36, 72
3. 45
4. Area = (3 X 3) + (7 X 3)
   = 9 + 21 = 30 cm^2

Model 9

First:

1. 9
2. 4 times more than 2
3. 5
4. 5
5. 4
6. 16
7. 0

Second:

1. 9
2. 5 X 6 = 30
3. 41, 43, 47
4. 200

Third:

1. A = 8 X 4 = 32 km^2
2. P = 15 + 8 + 10 + 6 + 5 + 14
   = 58 cm
   A = (10 X 8) + (14 X 5)
   = 80 + 70 = 150 cm^2
3. Equation: x = 5 X 9
   Answer: x = 45
4. ⓐ >   ⓑ =
   ⓒ >   ⓓ =

Model 10

First:

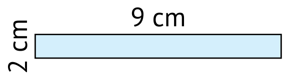
1. A = L X W
2. 20
3. 3
4. 6
5. 3 X 6 = b
6. 16
7. two factors only

Second:

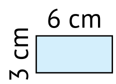
1. 100
2. 26
3. 7 , 35 = 5 X 7
4. 3

Third:

1. The number of books = 6 X 20 = 120 books
2. Number of books = 2 X 4 X 4
   = (2 X 4) X 4
   = 8 X 4 = 32 books
3. – The multiples of 2 are: 0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20
   – The multiples of 5 are: 0, 5, 10, 15, 20
   – The common multiples of the two numbers are: 0, 10, 20
4.



P = (9 + 2) X 2
= 22 cm



P = (6 + 3) X 2
= 18 cm

(1) Choose the correct answer:

1) 8,000 = …….. tens

a. 800 b. 80,000 c. 80 d. 8

2) A rectangle its length is L and its width is w what is its perimeter?

a. L + w b. 2 × (L + w) c. L × w d. (2 × L) + w

3) 45 is …….. times the number 5

a. 9 b. 6 c. 5 d. 40

4) The common multiple of all numbers is ……..

a. 0 b. 1 c. 2 d. 3

5) If a × 4 = 4 × 2 , then a = ……..

a. 8 b. 4 c. 2 d. 6

(2) Complete:

1) The only even prime number ……….
2) A garden in the shape of a square whose side length is 9 meters , then its area = ………. square meters
3) 200 × 3 = ……….
4) The numbers 1, 3, 9, 27 are factors of ……….
5) 19 × …… = 19

(3) Answer the following:

1) Find the G.C.F of 25 and 35

…………………………………………………………………………………………

2) A rectangular gymnasium is 7 meters long and 4 meters wide. Find its perimeter

…………………………………………………………………………………………

Test (2)

(1) Choose the correct answer:

1) 6 + 6 + 6 + 6 = 6 × ....
   a. 24 b. 4 c. 5 d. 6

2) 28 × 15 = 15 × 28 represents .... property
   a. Associative b. Commutative c. Identity multiplicative d. distributive

3) The common factor of all numbers is ....
   a. 3 b. 2 c. 1 d. 0

4) A square whose side length is 5 cm , then its perimeter is .... cm
   a. 20 b. 25 c. 15 d. 35

5) Which of the following is a multiple of 8?
   a. 1 b. 2 c. 4 d. 16

---

(2) Complete:

1) The multiplicative identity element is ....
2) If A × 6 = 18 , then A = ...
3) The G.C.F of 8 and 16 is ....
4) The area of a rectangle is 24 cm^2 and its width is 4 cm , then its length is .... cm
5) 3 × (5 × 4) = (3 × ....) × 4

---

(3) Answer the following:

1) Write all factors of the number 24, then decide if the number is a prime or composite.

   ....

2) A rectangular gymnasium is 7 meters long and 4 meters wide.
   Find its perimeter

   ....

Test (1)

1 Complete the following:

1. The perimeter of the square whose side length is 6 cm = ... cm.
2. The length of the rectangle whose area is 54 square centimeters and whose width is 6 centimeters = ... cm.
3. The number .... equals 10 times the number 8
4. If 3 x y = 24 , then y = ...

2 Choose the correct answer:

1. 6 times the number 4 equals ....
   a) 14 b) 24 c) 20 d) 10
2. Which of the following is a prime number?
   a) 14 b) 15 c) 17 d) 21
3. The factors 1, 2, 3, 6 are of the number ....
   a) 12 b) 18 c) 6 d) 24
4. A rectangle has a perimeter of 20 cm and a length of 7 cm, so its area = ... square centimeters.
   a) 140 b) 21 c) 91 d) 60

3 Match the equal products:

100 – (4 × 1) •	• 9 + 9 + 9 + 9 •	• 6 tens
100 – (8 × 8) •	• 5 × 12 •	• 8 × 12
72 – (3 × 4) •	• (6 × 10) + (4 × 9) •	• 3 × 12

4 Compare by using (<), (>) or (=):

1. The perimeter of a square with a side length of 8 cm. ◯ The perimeter of a rectangle whose length is 9 cm and width is 7 cm.
2. The area of a square whose perimeter is 28 cm. ◯ The area of a rectangle whose width is 5 cm and whose length is twice as its width.

5 The number of students in a class is between 30 and 40. This number is a multiple of 2 and a multiple of 3 at the same time. How many students are in this class?

....

Test (2)

1 First: Complete the following and mention the property used:

(a) (7 × ....) × 5 = 7 × (.............. × 5) = 70 (...................... property)

(b) 136 + 164 = 164 + ... = ... (...................... property)

Second: Find the value of the unknown in each of the following equations if:

(a) Y × 5 = 35
Y = ...

(b) 4 × K = 32
K = ...

(c) R × 18 = 1,800
R =

2 Choose the correct answer:

1. All the following are prime numbers except:
   (a) 2 (b) 3 (c) 15 (d) 17
2. The numbers of factors of the digit 8 equals:
   (a) 2 (b) 3 (c) 4 (d) 6
3. If: (7 x 400) + (7 x 50) + (7 x 3) = k x (400 + 50 + 3), then k = ...
   (a) 5 (b) 6 (c) 7 (d) 8

3 Put a (✓) for the correct statement and a (✗) for the incorrect statement:

1. The multiplication equation that expresses 9 + 9 + 9 + 9 is 9 x 9 ( )
2. Multiplication is a commutative process. ( )
3. All the numbers 1, 2, 3, 7, 11 are prime numbers. ( )

4 Compare by using (<), (>) or (=):

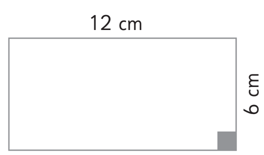
- a) 5 × 60 ◯ 3 × 1,000
- b) 120 × 4 ◯ 96 × 5
- c) 7 × 500 ◯ 6 × 650
- d) 100 × 7 ◯ 340 × 2

5 A square plot of land whose area is equal to a rectangular plot of land whose dimensions are 100 meters and 36 meters. What is the perimeter of the square plot of land?

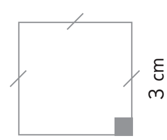
....

Test (3)

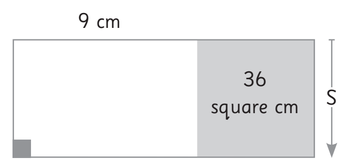
1 Find the perimeter and the area of each of the following figures:



Perimeter = ... = ... cm
Area = ... = ... square cm



Perimeter = ... = ... cm
Area = ... = ... square cm



S = ... cm, perimeter = ... cm
Area = ... square cm

2 Choose the correct answer:

1. The number .... is a multiple of the number 6.
   - a) 16
   - b) 26
   - c) 36
   - d) 63
2. The smallest prime number is ....
   - a) 0
   - b) 1
   - c) 2
   - d) 3
3. .... + 246 = 315 + 246
   - a) 513
   - b) 135
   - c) 351
   - d) 315

3 Compare by using (<), (>) or (=):

- a) 6 × 300 ◯ 9 × 200
- b) 24 × 100 ◯ 3 × 800
- c) 42 × 100 ◯ 7 × 80
- d) 93 × 100 ◯ 693 × 10

4 **Complete the following:**

1. The Greatest Common Factor of 30 , 50 is ....
2. Any number can be a multiple of 5 if its ones digit is .... or ....
3. 24 tens = ...
4. .... x 7 = 7 + 7 + 7 + 7 + 7

5 **Amal bought a box of biscuits of 3 layers. Each layer has 4 rows and 3 columns. How many biscuits are in the box?**

....

....

....

....

Test (4)

1 **Complete the following:**

1. (G.C.F) of 45 , 15 is ....
2. The factors of the number 24 are ....
3. 5 times the number 15 equals ....

2 **Put a (✓) for the correct statement and a (✗) for the incorrect statement:**

1. All the prime numbers are odd numbers. (   )
2. When the order of factors in a multiplication process changes, the product of multiplication changes. (   )
3. The number 24 is a multiple of 6. (   )

3 **Choose the correct answer:**

1. The perimeter of a square whose side length is 6 cm. ◯ The perimeter of a rectangle whose width is 8 cm and length is 9 cm.

   a) = b) < c) >

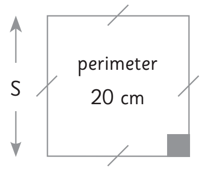
2. If 8 x B = 400, then B = ...

   a) 392 b) 5 c) 50 d) 500

3. The prime number whose sum of factors is 8 is ....

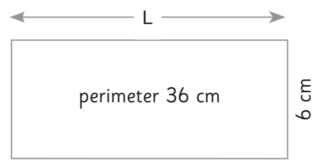
   a) 17 b) 7 c) 35 d) 15

4 Find the lengths of the unknown sides then calculate the area:



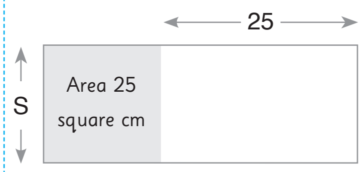
S = ... cm

The area = ... square cm



L = ... cm

The area = ... square cm



S = ... cm

The area = ... square cm

5 The football team surrounded a part of the pitch with ropes to play football. If the area required for this part is 115 meters long and 65 meters wide, what is the length of the rope needed to surround this part?

....

Test (5)

1 Complete the following:

(a) 8,000 = 8 × .... = 80 × .... = 800 × ....

(b) 9 × 8 × 10 = (9 × 8) × .... = ... × .... = ...

(c) 300 × 4 = 4 × .... = ...

2 Choose the correct answer:

1. 3 times the number .... equals 24
   (a) 6 (b) 7 (c) 8 (d) 9

2. The opposite bar chart represents
   (a) 7 + 5 (b) 7 × 5
   (c) 53 (d) 30

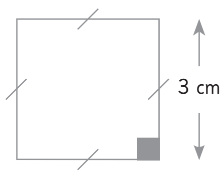
5	5	5	5	5	5	5

3. The number of factors of 49 equals ....
   (a) 2 (b) 3 (c) 4 (d) 57

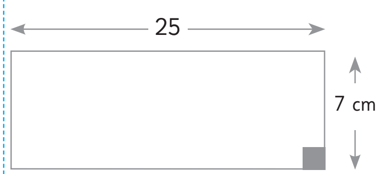
3 A school trip of 42 boys and 30 girls. The trip supervisor divided the students into groups of boys and groups of girls. What is the greatest number of groups that can be formed so that each group will have the same number of students?

- What is the number that will be in each group of boys?
- What is the number that will be in each group of girls?

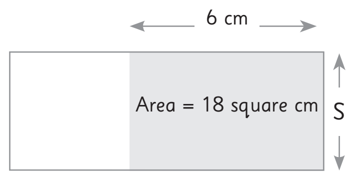
4 Find the perimeter and the area of each of the following figures:



The perimeter = ... cm
The area = ... square cm



The perimeter = ... cm
The area = ... square cm



The perimeter = ... cm
The area = ... square cm

5 If the speed of a passenger plane is 100 times the speed of a car, and if the car is doing 75 kilometers an hour, what is the speed of the plane?

....

Answers

Test 1

1 (1) 24 (2) 9 (3) 80 (4) 8

2 (1) b (2) c (3) c (4) b

3 100 – (4 × 1) = (6 × 10) + (4 × 9) = 8 × 12

100 – (8 × 8) = 9 + 9 + 9 + 9 = 3 × 12

72 – (3 × 4) = 5 × 12 = 6 tens

4 (1) = (2) <

5 36

Test 2

1 **First:** (a) (7 x 2) x 5 = 7 x (2 x 5) = 70 (associative property)

(b) 136 (commutative property)

Second: (a) Y = 7 (b) K = 8 (c) R = 100

2 (1) c (2) c (3) c

3 (1) ✗ (2) ✓ (3) ✗

4 (a) < (b) = (c) < (d) >

5 The perimeter of the square plot of land = (10 x 6) x 4 = 240 meters

Test 3

1 The perimeter = 36 cm, The area = 72 square cm

The perimeter = 12 cm, The area = 9 square cm

S = 6 cm, The perimeter = 42 cm, The area = 90 square cm

2 (1) c (2) c (3) d

3 (a) = (b) = (c) > (d) >

4 (1) 10 (2) 0 or 5 (3) 240 (4) 5

Test 4

1 ① 15 ② 1, 2, 3, 4, 6, 8, 12, 24 ③ 75

2 ① ✗ ② ✗ ③ ✓

3 ① c ② c ③ b

4 S = 5 cm, The area = 25

L = 12 cm, The area = 72 square cm

S = 5 cm, The area = 150 square cm

5 The length of the rope = 360 meters

Test 5

1 a $8 \times 1{,}000 = 80 \times 100 = 800 \times 10$

b $(9 \times 8) \times 10 = 72 \times 10 = 720$

c $4 \times 300 = 1{,}200$

2 ① c ② b ③ b

3 The greatest number of groups is 6

The number of boys in each group = 7

The number of girls in each group = 5

4 The perimeter = 12 cm, The area = 9 square cm

The perimeter = 64 cm, The area = 175 square cm

S = 3 cm, The perimeter = 24 cm, The area = 27 square cm

5 The speed of the plane = 7,500 kilometers an hour.

Exam (unit four)

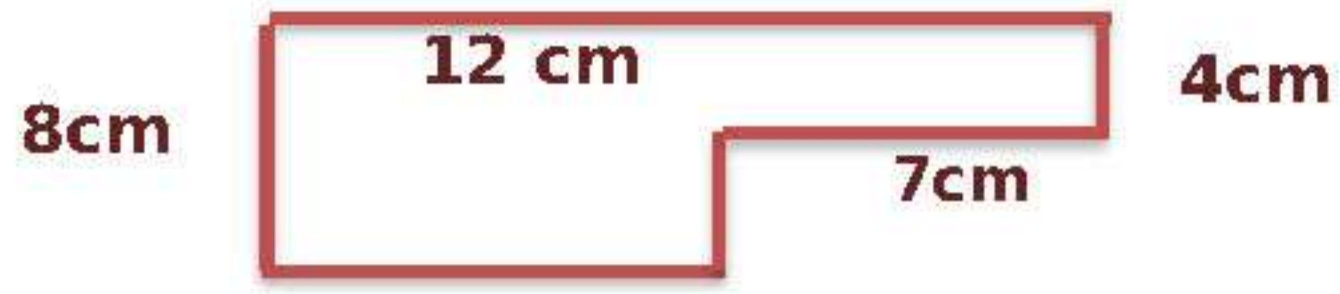
Example (1) Choose the correct answer

(1)	Area of a square = side length x.............						
(A)	Perimeter	(B)	side length	(C)	Area	(D)	otherwise
(2)	If a rectangle has a length of 5 cm and a width of 3 cm, then its perimeter = ... cm						
(A)	16	(B)	15	(C)	18	(D)	8
(3)	A square whose side length is 5 cm has a perimeter = ... cm						
(A)	150	(B)	20	(C)	25	(D)	30
(4)	A square has an area of 25 cm^2, and its side length = ... cm						
(A)	5	(B)	50	(C)	100	(D)	10
(5)	A rectangle of length L and width W, then its perimeter = ... cm						
(A)	L+W	(B)	2×(L+W)	(C)	L×(2+W)	(D)	2×(L×W)
(6)	If a rectangle has a length of 20 cm and a width of 10 cm, then its area = ... cm^2						
(A)	30	(B)	60	(C)	120	(D)	200
(7)	A rectangular garden whose width is 5 meters and its length is 7 meters. What is the area of the garden? .... M^2						
(A)	24	(B)	70	(C)	35	(D)	12

Example (2): - Complete

1	A square has an area of 49 cm2, then its perimeter is. Side length of a square = ... Perimeter of the square= ....
2	Perimeter of the rectangle = ...
3	A rectangle with a length of 5 dm and a width of 2 dm. find its Perimeter. ....
4	A square of side length 8 cm. find its circumference. Perimeter of the square = ...
5	side length of a square = perimeter ÷ ....
6	A square-shaped table, the side length of which is 4 m. Maryam wants to cover it with a tablecloth, so the area of the tablecloth = ... square metres
7	A rectangle with dimensions M cm and N cm, its area can be calculated from the relationship : ....
8	A square has a perimeter of 36 cm, then its side length = ... cm

Example (3) Choose the correct answer

(1)	6 cm Area = 30 cm^2 Width=							
(A)	2	(B)	3	(C)	4	(D)	5
(2)	The relation X + X + Y + Y = P expresses							
(A)	Area of a rectangle with dimensions X and Y	(B)	Perimeter of a rectangle with dimensions X, Y	(C)	Area of a square of side X	(D)	Perimeter of a square of side X
(3)	rectangle area							
(A)	L+W	(B)	L×W	(C)	L×(2+W)	(د)	2×(L×W)
(4)	A Milliard is the smallest number made up of .... digits							
(A)	5	(B)	6	(C)	10	(D)	7
(5)	A rectangle has a perimeter of 50 dm, find its width if its length is 20 dm.							
(A)	15	(B)	5	(C)	10	(D)	20
(6)	 Shape area = ...							
(A)	40	(B)	68	(C)	88	(D)	56
(7)	A rectangle has a perimeter of 24 cm, find its length if its width is 4 cm.							
(A)	10	(B)	20	(C)	8	(D)	4

Example (4): - Complete as required

1	Swimming pool in the form of a rectangle 12 m long and 8 m wide Calculate its circumference ....
2	A carpet in the shape of a square with a side length of 3 m. Find its area ....
3	A carpenter wants to cover a table, so if its dimensions are 4m by 6m, how many square meters of wood is needed to cover the table? ....

Exam (unit five)

Example (1) Choose the correct answer

(1)	Identity of multiplication is						
(A)	0	(B)	1	(C)	2	(D)	10
(2)	3 times the number 9 is						
(A)	3	(B)	9	(C)	27	(D)	39
(3)	The value of the unknown A in the equation: 18 = A × 6 is						
(A)	24	(B)	16	(C)	168	(D)	3
(4)	45is equal to .... times the number 5						
(A)	9	(B)	6	(C)	5	(D)	40
(5)	3 × 4,000 = 3 × 4 ×						
(A)	10	(B)	100	(C)	1,000	(D)	10,000
(6)	500 = ... tens						
(A)	5	(B)	50	(C)	500	(D)	5,000
(7)	Which of the following equations shows the commutative property of multiplication ?						
(A)	1×3=3	(B)	4×3=3×4	(C)	4×(5×3) (4×5)×3=	(D)	0=0×4

Example (2): - Complete

1	.... × 12 = 12 × 48
2	50 equals 5 times the number..................
3	.......×5=6+6+6+6+6
4	3 × (2 × 5) = ...
5	.... = M : ، 7 × 4 = M
6	.... = 10 × 5
7	10times the number 9 equals..............................
8	.... = 6 × 5 × 4

Example (3) Choose the correct answer

(1)	0 × 35 = ...						
(A)	0	(B)	35	(C)	350	(D)	305
(2)	[7 | 7 | 7] The corresponding bar chart shows that the number .... is equal to 3 times the number 7						
(A)	7	(B)	3	(C)	21	(D)	49
(3)	The number .... is equal to 6 times the number 3						
(A)	6	(B)	9	(C)	18	(D)	36
(4)	The equation that expresses that a number is 10 times the number 5 is...............						
(A)	A=10+5	(B)	A=10×5	(C)	A=10 - 5	(D)	10=A×5
(5)	2 × 3 × 4 = ...						
(A)	12	(B)	30	(C)	24	(D)	5
(6)	5 × A = 5 × 7 ، A = ...						
(A)	35	(B)	12	(C)	7	(D)	5
(7)	(3 × 6) × 7 = 3 × (6 × 7) A property is called						
(A)	commutation property	(B)	Identity of multiplication	(C)	Associative property	(D)	Multiplication by zero

Example (4): - Complete as required

1	Ayman ate 3 apples, and his brother ate 4 times what Ayman ate. How many apples did his brother eat? ....
2	If the price of an electrical device is 400 pounds, what is the price of 10 devices of the same type? ....
3	Doaa bought 3 boxes of pens, each box contains 4 pens, so if the price of one pen 5 pounds, what is the price of the pens that Doaa bought? ....
4	Find using properties of multiplication 6 × 2 × 5 ....

Exam (unit six)

Example (1) Choose the correct answer							
(1)	The only even prime number....................................						
(A)	1	(B)	2	(C)	3	(D)	4
(2)	(G C F) for the number 8, 12 is....................						
(A)	2	(B)	3	(C)	12	(د)	3
(3)	The number .... is a factor of the number 63						
(A)	2	(B)	5	(C)	7	(D)	11
(4)	Which of the following numbers is a prime number?						
(A)	1	(B)	50	(C)	14	(D)	11
(5)	Which of the following is a multiple of 9 ?						
(A)	30	(B)	50	(C)	18	(D)	6
(6)	The common factor for all numbers is						
(A)	0	(B)	1	(C)	2	(D)	3
(7)	A common multiple of 6 and 8 is the number......................						
(A)	8	(B)	6	(C)	48	(D)	40

Example (2): - Complete	
1	The prime number immediately following the number 11 is ....
2	The common factors of the numbers 4 and 16 are:....... , ... ,....
3	The prime number has .... factor
4	Multiples of 4 between 20 and 30 are....................................
5	If 35 = 5 × 7, then the number............ is a multiple of the two numbers .... , ...
6	The common multiple of 6 and 9 is............................
7	The numbers 20, 25, and 30 are multiples of a number...............
8	The number .... is the greatest common factor (GCF) of the numbers 7 and 14

Example (3) Choose the correct answer

(1)	The numbers 1, 2, 5, and 10 are factors of a number....................						
(A)	5	(B)	25	(C)	10	(D)	2
(2)	A prime number whose sum of factors is 8 is..........................						
(A)	7	(B)	5	(C)	13	(D)	11
(3)	Which of the following pairs has the same (GCF) for the numbers 12 and 42.......... ?						
(A)	9 ، 6	(B)	27 ، 8	(C)	60 ، 18	(D)	48 ، 36
(4)	Which of the following is a prime number...						
(A)	5	(B)	6	(C)	10	(D)	12
(5)	A factor of 63 is the number................						
(A)	6	(B)	7	(C)	8	(D)	10
(6)	Which of the following statements defines the relationship between the numbers 5 and 25?						
(A)	is a 5 multiple of 25	(B)	is a 5 factor of 25	(C)	factors 25 out of 5	(D)	is 5 5 times 25
(7)	The common multiple of all numbers is...............						
(A)	0	(B)	1	(C)	2	(D)	3

Example (4): - Complete as required

1	Find the common factors of the numbers 25 and 45 ....
2	Find the greatest common factor (GCF) of the numbers 12 and 30 ....
3	Write 3 common multiples of 2 and 4 ....
4	Deduce the relationship between the following numbers 24 ، 8 ، 2 ....

Unit (4) Assessment

[1] Choose the correct answer:

(1) A square of side length S, its perimeter = ...

ⓐ S + 4   ⓑ S ÷ 4   ⓒ S × 4   ⓓ S × S

(2) If the perimeter of a rectangle 20 cm, its width 4 cm. Its length = ... cm

ⓐ 4   ⓑ 5   ⓒ 10   ⓓ 6

(3) A rectangle of dimensions 20 cm and 10 cm, its area = ... cm^2.

ⓐ 10 + 20 × 2   ⓑ 10 + 20   ⓒ 60   ⓓ 200

(4) A rectangle whose length is L and width is W, its area = ...

ⓐ (2 × L) + W   ⓑ L × W   ⓒ (L + W) × 2   ⓓ L + W

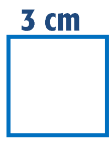
[2] Complete:

(1) The area of the opposite rectangle = ... cm^2.



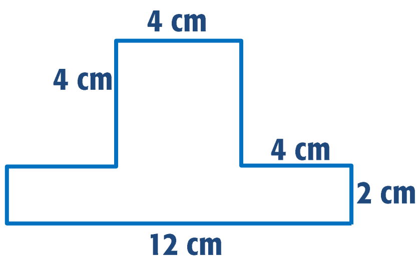
(2) A rectangle of dimensions 20 cm and 10 cm,
its perimeter = ... cm.

(3) The perimeter of the opposite square = ... cm.



[3] Find:

(1) Find the area and perimeter of the opposite figure:



....

....

....

....

....

....

Unit (5) Assessment

[1] Choose the correct answer:

(1) The multiplicative identity element is ....

ⓐ 0 ⓑ 1 ⓒ 2 ⓓ 3

(2) Which of the following represents the commutative property of multiplication?

ⓐ $5 \times 16 = (5 \times 11) + (5 \times 5)$ ⓒ $3 \times 1 = 3$
ⓑ $(6 \times 2) \times 4 = 6 \times (2 \times 4)$ ⓓ $6 \times 9 = 9 \times 6$

(3) $50 \times 1,000 =$ ....

ⓐ 5,000 ⓑ 500 ⓒ 50,000 ⓓ 50

(4) The numerical expression that represents: 3 times greater than 8 is 24 is ....

ⓐ $3 \times 8 = 24$ ⓑ $24 \times 8 = 3$ ⓒ $8 \times 8 = 24$ ⓓ $3 \times 24 = 8$

(5) If $a \times 31 = 31 \times 9$, then a = ...

ⓐ 40 ⓑ 31 ⓒ 1 ⓓ 9

(6) $(2 \times 3) \times 4 =$ ....

ⓐ 243 ⓑ 64 ⓒ $(2 + 3) \times 4$ ⓓ $2 \times (3 \times 4)$

(7) 6 times greater than 5 = ...

ⓐ 56 ⓑ 15 ⓒ 30 ⓓ 24

[2] Complete:

(1) 9 times greater than 3 = ...

(2) $35 \times 0 =$ .... and called .... property

(3) If $k = 7 \times 5$, then k = ...

(4) $5 \times 7 \times 2 =$ ....

(5) $(5 \times 3) \times 7 = 5 \times (\ldots\ldots \times 7)$

[3] Find:

(1) Ahmed read 5 books. Mohamed read 3 times more than Ahmed. Find the number of books that Mohamed read? ....

(2) Kareem has 9 pens, Ali has 27 pens. Ali is how many times more than Kareem?
....

Unit (6) Assessment

[1] Choose the correct answer:

(1) 17 has .... factor(s).

a 1 b 2 c 3 d 4

(2) .... is a multiple of 9.

a 4 b 36 c 16 d 6

(3) The smallest odd prime number is ....

a 0 b 1 c 2 d 3

(4) The common multiple of all numbers is ....

a 0 b 1 c 2 d 3

(5) The common factor of all numbers is ....

a 0 b 1 c 2 d 3

(6) .... is a composite number.

a 5 b 2 c 3 d 4

(7) The GCF of the two numbers 18 and 24 is ....

a 2 b 1 c 6 d 72

[2] Complete:

(1) The smallest prime number is ....

(2) The prime number that just after 7 is ....

(3) .... is a multiple of 3, since 3 × .... = 12.

(4) The factors of 8 are: ...... , ... , ... , ...

(5) .... is a common multiple of the two numbers 2 and 8.

[3] Find:

(1) Find the GCF of the two numbers: 12 and 18.

....

(2) Find 4 common multiples of the two numbers 2 and 4.

....